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Constructing positive social updrafts for extranormative personalities

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ABSTRACT

This case study examines one high school student, a young woman from the U.S., who was diagnosed with multiple mental illnesses and who, during the research, began to identify as a lesbian. Using a framework grounded in Vygotsky's defectological writing, the authors analyze the case in light of the focal participant's engagement with the international online anime art community, which provided her with a positive social updraft through which she entered a cultural stream that enabled her to represent and reflect on her emerging identity through conventions that were not available to her in mainstream culture. Relying on artifacts from digital art production and a series of interviews, the study examines the manner in which the focal participant employed the signs, tools, goals, values, and overall setting and contours of the anime culture to develop a positive sense of self, a goal difficult for her to achieve in mainstream society. The study concludes with a discussion of how Vygotsky's work in defectology has salience for 21st century mental health differences – characterized here as extranormative or neuroatypical – because of his emphasis on viewing the settings of human development, rather than individual points of difference, as the focus of intervention.

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[The] social educational system for the deaf is crowned by a children's communist movement, i.e., participation in the Young Pioneers, which involves children in the life of the working class and acquaints them with the experiences and struggles of adults. The heartbeat of the world is felt in the Pioneer Movement; a child learns to see himself as a participant in life on a world scale. In this child's play, the sprouts of those serious thoughts and actions ripen which will play a decisive role in this life. What is new in all of this, is that for the first time the child enters the mainstream of present day life. Moreover life is directed toward the future whereas it had been based on past historical human experience.

At the top level the children's Pioneer Movement turns into the Young Communist Movement, a sweeping, wide-scale, social and political education whereby the deaf-mute child lives and breathes with his whole country. His pulse, his efforts, his thoughts beat in unison with the masses.

[Vygotsky, 1993, p. 120]

Vygotsky (1993) projected this optimistic outcome for the many thousands of children who were physically and emotionally traumatized by continual warfare on Russian soil in the opening decades of the 20th century. Although one might contest the

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degree to which the Soviets succeeded in constructing such a society,² Vygotsky's (1993) ideas on what was termed *defectology* remain salient and provocative nearly a century later, in another type of nation altogether. In spite of claims that there is a singular United States with a traditional cultural heritage (e.g., Hirsch, 1987; Romney, 2010), much evidence suggests that the U.S. is a highly pluralistic nation in which multiple pathways for development are available (Hackney, 1997), particularly in a connected global world in which technology enables access to multiple international communities of practice (Eitzen & Zinn, 2011). We find Vygotsky's views of sweeping people of physical and neurological differences into the broader cultural flow to be amenable to adaptation to our case study of one young U.S. woman's work within an international genre, the Japanese art form known as anime, to find a social and cultural niche in spite of having an atypical neurological makeup that made life in the physical company of others a frequent challenge.

In this paper we first lay out those aspects of Vygotsky's (1993) views on the education of children who navigate life with physical makeups that fall outside the evolutionary norm, particularly those who are deaf, blind, mentally traumatized, or otherwise differently equipped. Our effort is not designed to incorporate every aspect of Vygotsky's defectological writing, but rather to distill his ideas to what is appropriate for our conception of neurological variation, especially that known as *mental illness*. After establishing his perspective on human difference and then outlining his view of the potential of mediational pathways toward satisfying lives, we focus on one young woman, Chloe (all names and places are pseudonyms), who faced life with multiple diagnoses of mental illness. We look at her construction of self within the mediational channels provided by one popular culture avenue, the Japanese anime movement: the art form centered on graphic novels and animated films and abetted by a multitude of online media for widespread international participation (Black, 2008; Black & Steinkuehler, 2008).

These channels illustrate the construct of a *positive social updraft*, by which we mean an activity system that enables full involvement in worthwhile cultural action, particularly among those who are considered to be social or cultural outsiders who might otherwise be limited in opportunities for legitimate social participation. This metaphor may be applied to engagement in many pursuits, from players of particular video games to participants in youth music programs, the context in which we first referred to this construct in print (Walker & Smagorinsky, 2013). In this study we focus on one type of positive social updraft, that experienced by case study participant Chloe, a youth classified as mentally ill, who further began to identify as a lesbian and who in general experienced life as an outsider. The data suggest that Chloe found acceptance, reinforcement, a community of fellow artists, friendship, feedback, and a means of growth in the online anime community.

The metaphor of *updraft* is taken from the process of wind currents such as those that are swept up a chimney. These currents not only have an upward motion themselves, but they also catch other elements in their draft and carry them up in their flow. The idea of a wind draft is also evident among racers who follow other competitors in order to be drawn along in the air currents created by opponents who precede them on the course. A social updraft provides cultural mediational means that include people in a teleological current headed "upward" — in this case, toward the cultural schemata that to Vygotsky (1987) enable participation in social groups (Cole, 1996) — and thus allow people of atypical makeups to become fully involved in significant cultural activity that brings them a feeling of social belonging.³

² The violence — with roots dating to the mid-19th century (Figes, 1997) — began with the 1904–1905 Russo-Japanese War, in which Japan defeated Russia in a dispute over control of Manchuria and Korea. During the war, the populist strikes that begat the Russian Revolution of 1905 began, an uprising that was defeated yet that resulted in continual unrest in response to subsequent Tsarist repression. The conflicts moved to external enemies with the onset of World War I in 1914, and took a second internecine turn with the Russian Revolution, which erupted during World War I in opposition to the Tsar's conduct of war against Germany and its allies. The overthrow of the Tsar in the 1917 Revolution, with World War I intensely underway, produced a power vacuum that was contested in the Russian Civil War from 1917 to 1922 and its aftermath lasting until 1924, the year of the certification of the Soviet Constitution, Lenin's death, and the subsequent power struggle within the Politburo that produced a violent process of ascension for Stalin. Following these decades of intense conflict that served as the setting for his early life, and uplifted by the possibilities of a more inclusive society envisioned at the launch of the Soviet Union, Vygotsky (1993) believed that The Pioneer and Young Communist Movements would provide what we call the *positive social updraft* through which injured children could be swept up in mainstream social currents such that, rather than being considered as damaged and deficient, they would be viewed as different in capability yet not deficient in social status, societal value, and cultural contribution. To Vygotsky, an inclusive Soviet culture could be achieved through these movements by providing a single social channel toward a more enlightened and equitable nation, one that could provide the model for the rest of Europe to abandon its class-based inequalities and move toward more collectivist and representative approaches to social organization. Vygotsky's optimism for the potential of Soviet communism was betrayed by Stalin's brutal, totalitarian means of collectivizing the Ukrainian peasants' farmlands and food supplies in order to support the more urban industrialized society he sought to force into being (Snyder, 2010). In 1932–1933 alone, well over 3 million Soviet Ukrainians starved when their farmlands were seized and the demands on them for increased production resulted in immense suffering, with rape, beatings, execution, and other crimes administered to those who resisted in any form and cannibalism, prostitution, and other degradations serving as the peasants' last resorts in surviving the famine that, ironically, occurred in one of Europe's most productive agrarian regions as a consequence of Stalin's policies. The Young Pioneers and Young Communists were given a role in starving the peasants to feed the proletariat. As described by Snyder, "Members of the Young Communists served in the brigades that requisitioned food. Still, younger children, in the Pioneers, were supposed to be 'the eyes and ears of the party inside the family.' The healthier ones were assigned to watch over the fields to prevent theft. Half a million preadolescent and young teenage boys and girls stood in the watch towers observing adults in the Soviet Ukraine in summer 1933. All children were expected to report on their parents" (p. 50). The notion of a *positive social updraft* that we offer in this paper assumes, as did Vygotsky, that immersion in mainstream social life engages one in pro-social, rather than pernicious and deadly social currents.

³ Although the term "positive" is relative in interpretation, on the whole it refers to socially constructive practices that lead toward the achievement of cultural ends. Some cultural practices and the larger purposes toward which they are put could be considered other than positive for the broader society. In the U.S., for example, participation in street gang life, while providing disenfranchised youth with a sense of belonging, could not be considered positive because gang initiation rites often involve felony behaviors of rape, murder, robbery, and other offenses against others, and continued conduct of this sort is typically required of continuing membership (Huff, 1990). The notion of "positive" becomes problematic when a whole society, such as Nazi Germany, is organized to promote destruction of other cultures, leading to conduct deemed positive from within but negative from without. Our use of the term assumes that a positive social updraft contributes to a constructive orientation to social life broadly speaking. We state this requirement with the understanding that the society from which we write this paper, the 21st century United States, was founded by European émigrés whose actions toward the continent's indigenous people were considered positive from their own perspective, but catastrophic and persistent through modern times from the aboriginal standpoint (Four Arrows, 2006).

The illustrative data provided from this case suggest the ways in which people who depart from the diagnostic mental health norm, rather than being deficient, require different mediational means to feel that they are part of broader communities of practice. In such a positive social updraft, status and feelings of validation are just as available to them as they are to those whose neurological makeup falls within the typical range. That is, we adapt Vygotsky's (1993) outline of defectological education to the issue of 21st century mental health, using the example of a young woman who survived suicidal thinking and the feeling of being rejected as a teen by becoming an active and respected member of the online anime community. In doing so she became a participant in a global social movement, finding success and acceptance within the context of a broader society not designed to accommodate people like her. We inquire into the following questions in this case study:

1. Given her diagnoses of mental illness, what obstacles did case study participant Chloe face in finding a community of practice with which to engage?
2. What mediational tools facilitated her involvement with this community of practice?
3. To what extent did participation in this community of practice provide Chloe with a positive social updraft through which to find personal validation and social acceptance?

1. Vygotsky on defectology

Volume 2 of the *Collected Works*, which assembles Vygotsky's (1993) work in *The Fundamentals of Defectology (Abnormal Psychology and Learning Disabilities)*, has been among his most neglected contributions to the field of human development. A search conducted at the time of this writing via Harzing's *Publish or Perish* software found that Vygotsky had been referenced a total of 24,427 times in scholarly work. Of this total, Volume 2 had been referenced 41 times in English and roughly 100 times in other languages.⁴ The following review attends to those aspects of his defectological writing that are relevant to our inquiry into our research questions. More comprehensive summaries of Volume 2 are available in Kozulin and Gindis (2007), Smagorinsky (2011), and other sources.

1.1. Defect vs. difference

The term *defectology* mischaracterizes Vygotsky's (1993) own approach to differences from the evolutionary norm, which he did not consider to be defective or prohibitive in enabling a full immersion in societal life. Vygotsky's approach to the education of the blind, the deaf, the maimed, the cognitively different, and others falling outside the diagnostic norm explicitly avoided attending to the point of difference in the individual. Instead, he focused on the *settings of human development* and their role in supporting and accommodating those considered outside the normal range. In other words, he considered the treatment of people of difference to be a *social problem*, rather than a problem of the individual of difference. This approach is well illustrated by Hjörne, Larsson, and Säljö (2010), who crucially conclude that the social languages used in schools to describe students of difference focus on "naming and individualising children's problems; a multifaceted and complex situation is transformed into a dysfunction within the child, rather than an opportunity for the school to adjust its pedagogical practices to support the child" (p. 89).

The axiom that problems of difference are societal rather than individual underlies our approach to considering the education of *extranormal* or *neuroatypical* populations, those whose mental makeup stands outside the norm — not in deficit, but in relation to different orientations to the social and natural worlds (see Smagorinsky, 2011, 2012a, 2012b). *Extranormal* bypasses the assumption that there is a human norm, departures from which are indicative of deficiencies, such as the term "abnormal" in the subtitle of Volume 2 (Vygotsky (1993)). *Neuroatypical* is derived from "neurotypical," the term that those on the Asperger's Syndrome spectrum use for people who understand and participate in the production of conventional social conduct, such as etiquette and other affected behaviors that often mask real feelings and intentions. To neuroatypicals, the obsession among those on the "normal" mental health spectrum with adhering to social rules, dressing according to mainstream fashion, feigning politeness with those they dislike, and engaging in other socially acceptable conduct serves as superficial and disingenuous courtesies that distort, rather than promote, authentic social relationships, and that waste time and energy in the construction and maintenance of appearances.

Vygotsky (1993) resisted the idea that a difference is a deficiency, arguing instead that departures from the evolutionary norm simply call for alternative or "roundabout" means of mediation that enable progress toward a teleological cultural end. The potential for more optimistic, future-oriented, and possibility-centered settings for development is available, he argued, and should become the focus of educational psychology and practice. Areas of difference, he asserted, do provide obstacles, yet may stimulate compensatory processes that enable action through other means. His emphasis on the whole of a child's personality and capabilities in relation to a greater social whole separated him from those who viewed difference as an isolated problem to be treated directly in the individual.

⁴ We counted 88 specific occasions in French, Spanish, and Russian, but our limitations in translating non-English titles lead to an estimate that undoubtedly underrepresents the degree to which Vygotsky's defectological writing has been referenced outside the English-speaking world. It is also possible that Google Scholar, which provides the database for the Australian software Harzing's *Publish or Perish*, misses some publications from outside the English-language journals, although they do identify quite a few, so perhaps any undercount would be proportional across the range of his writing. If the search results are proportionally representative of the referencing of all of Vygotsky's many texts, we can safely conclude that Vygotsky's work in defectology remains an underappreciated strand of his research.

One must thus abandon the language and ideology of deficit in taking a [Vygotsky \(1993\)](#) perspective on difference. Doing so is more easily said than done, especially when one considers that people with bipolar, obsessive–compulsive, depressive, anxious, and other extranormative personality makeups can appear to lack what others have in terms of personal stability and social functioning. People with extreme departures from the norm can be socially threatening and dangerous, not merely in their odd manner and affect but in their occasional tendencies toward violence and destruction, often in response to insensitive treatment from those in their surroundings. These sensational cases of asocial and antisocial behaviors often form the primary perception that many have of people considered to be mentally ill, an impression that gains traction when they bring weapons to schools or workplaces and undertake mass violence.

Yet with a proliferation of diagnoses that consider all manner of departures from the evolutionary norm to be signs of illness, one needn't be psychotic in order to be classified as mentally ill in the 21st century. The spectrum of difference represented by those who take medication to treat anxiety and those so psychotic that they commit mass murder suggests the extreme range of mental health difference and the difficulty of generalizing about populations of people classified as mentally ill. As our examples suggest, some people are so far removed from prosocial understandings that they require interventions that protect others from their potential to act out violently, and we would never underestimate the tragic consequences of taking their need for intervention too lightly.

At the same time, each of this paper's two coauthors lives with conditions that initially brought us shame before we began to identify ourselves publicly with our points of difference (for the first author, bipolar disorder and a comorbid diagnosis of Attention Deficit Disorder; and for the second, chronic anxiety, obsessive compulsiveness, and although formally undiagnosed, Asperger's and Tourette's syndromes). Our ability to find the proper social and cultural channels for our makeups — although not until adulthood — leads us to embrace [Vygotsky's \(1993\)](#) position on the need for positive social updrafts to be available for those who are different yet potentially productive members of a society, and to do so at early enough ages that feelings of inadequacy do not become reinforced from without and ossified over time. Indeed, we find that the work environment of the professoriate might provide an appropriate positive social updraft for those of extranormal psychological makeup. The scholarly world emphasizes the construction of narrow, highly focused worlds of endeavor that do not necessarily require conventional social skills for success, and often are well-suited for those whose atypical perspectives and formulations enable new and compelling ways of approaching both entrenched and emerging problems, even as they may lack the interpersonal skills to convey those ideas effectively or establish good working relationships in advancing them through professional social hierarchies.

1.2. Feelings of inadequacy

[Vygotsky \(1993\)](#) argued that the feelings of inadequacy that often accompany cognitive or physical difference typically have one of two very different effects on those affected. Most commonly, feelings of inadequacy are produced by the deficit view that often is directed toward those of difference, and this environment of pity, charity, rejection, dismissal, and other forms of condescension results in a *secondary disability*: the feeling of stigma that leads to a long-term belief that one is inferior. *This secondary disability, argues Vygotsky, is far more debilitating to the individual than the source of difference itself.*

The social problem of how people view and treat these individuals should thus serve as the focus of intervention, in that people tend not see themselves as different until treated by others as such. Education, [Vygotsky \(1993\)](#) argued, “must cope not so much with these biological factors as with their social consequences” (p. 66; emphasis in original). He asserted that through the creation of future-oriented mediational settings, alternative pathways of development may be opened and cultivated so that a point of cognitive or physical difference could be reconsidered as a stimulus for an alternative developmental pathway such that each person's strengths are fostered and developed.

More positively, feelings of inadequacy can produce generative action designed to circumvent (rather than overcome) the area of difference so that broader cultural activity is available through alternative, adaptive means. [Vygotsky \(1993\)](#) emphasized the need for an inclusive view of difference such that anyone, regardless of how others may view his or her prospects for social participation and acceptance, can find alternative pathways of development that result in full involvement and appreciation in society's broader activities. In other work (2004), he asserted that those hypothetical people who are perfectly adapted to their environments would have nothing to strive for, because intellect develops through the process of adaption to circumstances; “thinking means overcoming difficulties,” he concluded ([Vygotsky, 1993, p. 194](#); cf. [Tulviste, 1991](#), who posited that people learn to think by engaging with the problems provided by their environments).

A feeling of inadequacy can thus have a beneficial effect when learners are treated as productive people adapting to their environments whose actions can help them grow toward greater cultural competence. In these settings, participants are provided with “special cultural tools suitable to the psychological make-up of such a child ... because the most important and decisive condition of cultural development — precisely the ability to use psychological tools — is preserved in such children” ([Vygotsky, 1993, p. 47](#); emphasis in original).

1.3. The social updraft of productive labor

[Vygotsky \(1993\)](#) believed that society's goal ought to be to promote its culture's higher mental functions in all citizens. His (1934/1987) outline of how culturally-specific ways of thinking are learned through cultural practice, thus forming the basis of social life, informed his view of educating children of difference. Vygotsky's vision for the education of extranormal learners centered on helping them achieve social status. Life's basic goal, he presumed, is to become socialized. Everyday social action helps to foster alternative pathways toward conventional ends for people of difference. These channels, rather than establishing rigid conduits that allow for no creative or novel action, provide a general sense of direction through which new possibilities are

available. This activity toward a shared, constructive social goal, which is jointly undertaken with the support of sympathetic people in the environment, provides the positive social updraft that serves as the central metaphor for our analysis.

The Soviet Union was designed to promote, and ultimately force, a monoculture on people of remarkable spatial and cultural distribution (see, e.g., the judgments of Luria, 1976, in his study of problem-solving among remote peasants in Kazakhstan and Uzbekistan who were geographically isolated in mountainous territory and culturally Muslim, and the deficit conclusions drawn about their rational capabilities). The U.S. has experienced a push toward nativism and a common cultural heritage as society becomes more diverse, and as immigrants of color from Mesoamerica seek work opportunities in its economy (Schrag, 2010) — an ironic circumstance given that this Eurocentric culture required the destruction of native societies in order to establish its form of governance and economy (Four Arrows, 2006). Yet its concurrent tradition of pluralism in conjunction with the availability of new forms of mediation through international sources by means of technology has provided not only alternative routes toward conventional ends, but also a proliferation of ends toward which to strive in cultural practice, some grounded in U.S. culture and some that rely on the avenues available through international and hybrid forms of activity.

This diversity of activity has enabled more people to find satisfying social niches through which to feel included and achieve social status, and an abundance of mediational means through which to direct action. One of these channels, the international anime art field and the electronically-enabled communities of practice that promote participation within it, served as the positive social updraft for the young woman whose case we next report as illustrative of Vygotsky's (1993) view of difference, adapted to 21st century mental health issues.

2. Context of the investigation

2.1. Chloe

Chloe, our focal participant, lived her childhood and adolescence in three U.S. cities. After spending her first four years in an upper Midwestern suburb, she and her family relocated to a Southwestern town, and then when she was 12 and entering 7th grade, they moved to a similarly-sized town in the Southeast. By 2nd grade she began presenting symptoms of anxiety by engaging in trichotillomania, i.e., continually pulling out her hair. Though this White, upper middle class young woman was considered academically gifted by her teachers, in 4th grade she started making occasional low grades. Concerned over her falling grades, comments from her teachers, her difficulty sustaining peer relationships, and her behavior at home, her parents took her to several doctors, one of whom started her on a high blood pressure medication to moderate the incessant physical tics that were soon diagnosed as symptoms of Tourette's syndrome. At the onset of puberty and coincidental with the move across the country, she began to display characteristics of depression, obsessive compulsiveness, oppositional defiance, and mild psychosis. During high school she was hospitalized twice for depression and related problems that were manifested in violent and profane outbursts that served as evening rituals in her home.

At 18 she was diagnosed with Pervasive Developmental Disorder — Not Otherwise Specified (PDD-NOS), a condition considered to be part of the spectrum of Asperger's Syndrome. This state is characterized by exhibiting atypical social skills that include seemingly odd verbal and nonverbal communication tendencies, repetitive behaviors or interests, and delayed social maturation, accompanied by high levels of intelligence. In addition, those on this spectrum will often have unusual responses to sensory experiences, such as certain sounds, the way objects look, and physical contact with others. They further have difficulty responding to environmental changes, suggesting that the cross-country move in residence might have helped to trigger and amplify her oppositional response to her new surroundings. During this period she was exposed to a variety of pharmacological and behavioral therapies to moderate her symptoms.

The data focus on Chloe's years as a high school student. Like her parents and younger brother, Chloe had her own computer, which she supplemented with peripherals such as a scanner and graphics tablet — a device upon which she could draw images by hand that became digital graphics on her computer — for producing her anime art. She spent every moment she was allowed multitasking rapidly across her various activities, which included chatting online, downloading music and anime, drawing characters on her tablet and then coloring them with art software, uploading art to her online gallery, visiting fellow artists' online galleries and commenting on their work, learning web design skills for displaying her work, and engaging in other online interactions with her anime community. When she wasn't on her computer, she was agitating with her parents to have access to it.

A second area of difference for Chloe was in her sexual orientation. During the research period she came to acknowledge her lesbian identity. This orientation, at the time of the data collection, emerged in a part of the U.S. dominated by the Southern Baptist Church, whose official position on LGBTQ sexuality is stated on its website as follows:

We affirm God's plan for marriage and sexual intimacy — one man, and one woman, for life. Homosexuality⁵ is not a “valid alternative lifestyle.” The Bible condemns it as sin. It is not, however, unforgivable sin. The same redemption available to all sinners is available to homosexuals. They, too, may become new creations in Christ.

⁵ The term “homosexuality” has become associated with discriminatory attitudes, such as those in evidence in this statement; underestimates the range of orientations with which people identify; and is associated with its clinical past, when being lesbian or gay was officially a mental illness until non-heterosexual orientations were removed from this category in the 4th edition of the American Psychiatric Association's (1994) *Diagnostic and Statistical Manual*. In the U.S., among those who stand outside heteronormative positioning, the use of “homosexual” is thus viewed as obsolete and replete with bias, and so has been rejected in favor of the more politically proactive LGBTQ, which more properly maps on to the current range of makeups and dispositions (GLAAD, 2013).

As both an atheist and lesbian, Chloe fell outside the dominant culture's belief and value systems; these points of difference compounded the degrees of adaptation required by her discrepant mental health profile in engaging fruitfully with her social surroundings. Although at this point in life she was not open to others about her sexuality, she did feel an outsider in the company of her Baptist peers and more broadly speaking the mainstream youth culture they inhabited. As we will describe, Chloe explored her sexuality through her anime art rather than through physical relationships.

2.2. Anime: a brief overview

With roots in early 20th century Japan, anime culture has its own conventions that have gradually become more mainstream as graphic novels and other anime-based media have become more popular and available. Like many young people from the 1990s, Chloe was introduced to anime through *Pokémon*, through which she collected and traded cards, competed in weekly gatherings held in a local bookstore, formed a cartoon club in which she and other teen girls met to draw and talk about their art, and watched videos and related programs whenever possible. Chloe's interest in anime matured toward the state of being an *otaku*, a Japanese term for obsession that is frequently applied to those immersed in anime (Tobin, 1999). It is somewhat synonymous with "geek," a broadly pejorative term that Chloe, like others with whom she socialized in these venues, co-opted sardonically to refer to herself to indicate her membership and status within the community.

Manga, a form of Japanese graphic novel, became Chloe's favorite reading material, and she began to produce artistic stories in the medium of *dojinshi*, or official fan fiction, a medium in which admirers of particular fictional works — often series such as *Harry Potter* or *Twilight* — collaborate on new stories based on the originals. Chloe's collection of manga and fan-sub — short for "fan subtitled" and referring to a film or television program that has been translated by amateur fans and subtitled into a new language — included new Japanese releases unavailable in the U.S. for which she would pay up to \$100 so as to stay as current as possible.

Chloe attended annual conventions in the nearby metropolitan area through which she would meet her online friends and set up her own table to sell anime art she had produced. During high school, she enrolled in a Japanese class at the nearby university's adult education program so that she would be able to understand the original versions of manga and films. Through this obsessive engagement with anime culture, and as an *otaku*, Chloe took on a rather snobbish stance within the broader community, referring to mere dabblers as being in the "lower class" of enthusiasts. Her obsessive-compulsive tendencies and Asperger's behaviors of intense concentration on narrow interests were suited to the depth of focus this community required of its *otakus*. For instance, she colored her digital art pixel by pixel (albeit at a frantic and staccato pace), a dedication to detail beyond the patience of most people.

3. Method

3.1. Data collection

Data are taken from (Cook's 2004) case study of a young woman diagnosed with depressive disorders and her efforts to construct a sense of self in the midst of social challenges following from her extranormative makeup. She was thus not so much selected for this study, as she was a volunteer participant for case analysis. Chloe and her parents signed informed consent forms that had been approved by the authors' Institutional Review Board. Her case has appeared in other publications with her approval, and now as an adult she has approved of her case being featured in this article, which includes empirical data not available in previous publications. Chloe was consulted for member checks during the initial data analysis and has in each case been presented with the opportunity to read manuscripts in advance with the option to provide corrections and block publication.

The data include five interviews; archival documents such as school assignments, artwork, and personal web pages; the first author's research notebook with analytical memos; interviews with Chloe's parents; and an interview with her therapist at the time of the study. Data collection took place over a 2 1/2 year period, with additional information available from the years that followed.

The first interview was based on oral history interviewing techniques (Dunaway, Baum, American Association for State and Local History, & Oral History Association, 1984) and focused on getting a family and social history, stories about mental health issues, and educational information. The second interview relied on the first to generate questions so that Chloe could check for errors in sequence or relation and expand on events. The third interview was a photo elicitation interview (Harper, 1984) in which Chloe chose an assortment of about 20 pictures of her family and friends and talked about them. The fourth interview was a "self box" interview for which Chloe compiled objects that she felt were self-representative and explained their importance. The exit interview allowed Chloe to provide updates and to respond to queries for clarification about the data set as a whole.

3.2. Data analysis

The first author used a frame analysis (Goffman, 1974) — a means of studying the organization of experience — of three specific narrative strips of experience that emerged in the interview cycle that revealed tension between Chloe and her parents surrounding the issue of computer usage. Additional analysis identified the mediational means she had access to and was using at this time, identifying the signs and tools that Chloe employed to navigate her environment. A critical visual analysis (Rose, 2007)

of two select pieces from Chloe's artwork and websites identified the "social life" of Chloe's characters, with a focus on *materiality*, *composition*, *(re)contextualization*, and *performance* through the lens of anime and graphic arts production.

The analysis involved macro and microlevel analyses. The first author began the macroanalysis with a frame analysis of three specific narrative strips of experience that emerged in the interview cycle. The strips suggest the tension between Chloe and her parents surrounding the issue of computer usage as an analytic opening. She then used Atlas.ti software to analyze the interview data for the mediational means she had access to and was using at this time, identifying the signs and tools through which Chloe engaged with her surroundings (Smagorinsky & Coppock, 1994; Wertsch, 1985).

The first author created a graphic representation of Chloe's predominant mediational means in relation to her figured worlds (Holland, Lachicotte, Skinner, & Cain, 1998) of anime and art. In addition to sorting the codes categorically, then thematically, the data graphics enabled connections between and among the various codes, categories, and themes. The two thematic visualizations of art and anime revealed how the codes populate the categories and draw attention to the intersections of the mediational means of *computers*, *collaborative writing and drawing*, *character creation*, and *online trade and commerce*.

After the macro level analysis, the first author performed a critical visual analysis (Rose, 2007) of two select pieces from Chloe's artwork and websites. Chloe provided two texts she created during the data collection, "Moon_A Timeline" (see Fig. 2) and "Axxxx_Phoenix _Rising" (see Fig. 3) from her oeuvre for the analysis. (All names of drawings and characters have been altered to ensure participant confidentiality.)

Critical visual analysis rests on the assumption that "images and their viewers are co-constructed through what is done with the images" (Rose, 2007, p. 226), requiring the first author to acknowledge her own subjectivity during the analytic process. She complemented her analysis by versing herself in popular and scholarly articles on anime and graphic arts. This corroboration, along with Chloe's retrospective accounts of her composing, helped to minimize the problem that "visual images have some sort of agency which exceeds, or is different from, the meanings brought to them by their producers and their viewers" (Rose, p. 21), a dilemma shared with linguistic texts that have been prone to the *intentional fallacy*, i.e., the effort to attribute intention to authors in their writing (Wimsatt, 1954).

4. Findings

We next provide an account of how Chloe immersed herself in the cultural stream of the anime community to provide her life with a positive social updraft through which she became a producer and consumer of anime art, in both personal and commercial senses. This affirmative participation co-occurred with her strong feelings of being out of synch with her schoolmates and family due to the neurological and sexual differences that made her seem odd and ill-fitting with mainstream interests, conventions, and social activities.

We represent these experiences in a generally positive light, although we must caution that her involvement with anime and construction of a positive sense of self within this community of practice included many troubles that were compounded by her neuroatypical makeup. During this time she continually fought with her parents and brother, strained her personal friendships through her tendency to overwhelm them with her interests, damaged her physical environment with her outbursts of anger, was twice hospitalized for depression, transferred schools because the private school in which she was initially enrolled provided her with no social niches in which to make friends or engage her interests, undertook psychiatric therapy and medication programs to moderate her extreme tendencies, dedicated any money she received through gifts and allowance to anime investments at the expense of other needs and interests, and experienced suicidal thoughts following from her unhappiness with her material world.

We do not wish, then, to represent her involvement in the anime culture as utterly pleasant and smooth, or as an unproblematic departure from mainstream social life. Rather, we see it as providing a medium for her obsessions through which she was able to take on a future orientation, express her growing sense of self in relation to supportive reinforcement from both corporal and virtual friends, produce art that met with positive response and thus helped to socialize her into what has evolved as an established cultural niche that has continued to enable her growth into a satisfying adulthood, and thus enable her to work within a positive social updraft that, as (Vygotsky's 1993) envisioned for youth of difference who were socialized into Soviet institutions, enabled her to participate in a legitimate cultural activity.

4.1. Expressing and exploring sexuality through character construction

Chloe was adept in the literary act of creating characters. She spent a great deal of time drawing fan fiction and creating characters through online and in-person collaborations with her friends:

I talk to friends, and I'm on a couple mailing lists, and I do ... role playing games where I role play as a character, and I write as that person from that person's point of view, and other people write from their characters' point of view. And we have, tie together into one story, or more than one story. It's really fun. And then I'm on fan art mailing list where we all send in the art that we've done and we give comments and tips on it.

She drew on the conventions of the anime culture to develop many characters of her own. She created her own "furries," animal-based characters with a human form; collaboratively composed a fan-fiction novel based on the *Animorphs* book series; and developed an online persona, Moon, who changed over time as Chloe herself matured (Moon and all other persona names are pseudonyms). She also began to participate in the activities afforded by websites dedicated solely to fan fiction and fan art,

writing and drawing several collaborative manga.⁶ Some of the characters in a manga she was working on while in high school included Tayato, the evil villain; Lena, his guardian the wolf-woman; Kati, a metal goddess; Kotakoza, the wind; Hirishi, his guardian and a bird of paradise; Kiane, a fire girl; Shikasi, her guardian; and Kokashi, the plague. These characters were adaptations of online characters with which she and her virtual and material friends interacted.

At the time, Chloe had a close male friend, Jason, whom she sometimes called her boyfriend. Chloe ultimately went through a period of identification as bisexual before openly identifying as lesbian, around the same time that Jason came out as gay. Among the affordances of her art was the opportunity to explore issues of sexuality she was experiencing throughout her adolescence. Like others on the Asperger's spectrum, Chloe did not like being touched, making her sexuality difficult to experience in real relationships. Her artwork provided the medium through which she could express sexual ambivalence and ultimately sexual identity, and the online anime community provided abundant channels through which such expression could find acceptance, given that it includes a range of erotic subgenres (e.g., Hentai).

Chloe's portfolio drawings suggested that she had played with defining the kind of "sex" she was allowed to view. She experimented with *yaoi*, meaning "boys' love" and referring to female-oriented fictional media that focus on male sexual and romantic relationships. The intricacies of this form of anime are reflected in Chloe's art work: stories of incest such as brothers in love, a *seme* (dominant) and an *uke* (submissive) male pairing, and detailed drafting of the characters. According to Wilson and Toku (2004), *yaoi* "permits women to reconstruct themselves along masculine lines and to gain status" (p. 100). The male body, less known to most adolescent females, provides a blank slate on which to ascribe new forms of femininity. Similarly, Chloe's own character creations fell within the standards for depictions of females in anime. Exaggeration of the breasts, legs, and lips allowed Chloe and those with whom she collaborated to explore the female body without having to engage sexually in the physical world. Virtually, then, the anime culture and its attendant electronic tools enabled Chloe, for whom physical engagement with the material social world was restrictive, to participate in the sort of play-oriented growth that Vygotsky (1978) asserts is a central form of social activity through which people learn means of self-regulation within rule-governed settings.

Chloe and her friends used the characters they created to explore gender and sexual roles. Her favorite characters to draw, Touya Akira and Shindou Hikaru, were two androgynous-looking men who were often paired together as a romantic couple. Although she reported that her parents tried to limit her exposure to sexual images online, she nonetheless was intrigued by and experimented with what she called "different pairings" such as "guy/guy sex," "guy/guy relationships with no sex, kissing yes," and similar "girl/girl" relationships. She abided by her parents' rules as much as possible, but she felt their lack of knowledge about online environments was interfering with the social trajectory she saw for herself, mediated by her participation in the online anime cultural world.

Through collaborative character creation, Chloe and her online friends constructed characters and situations in the anime culture. Chloe's access to these worlds enabled her to try on roles in virtual and, eventually, material environments. Her online worlds and the community at the art-focused college she attended after high school⁷ provided her with a social space and resulting updraft in which sexual exploration was normative among those both with and without obsessive-compulsive makeups. This projective identity (Gee, 2003) eventually changed Chloe's own appearance as she adopted an anime-based fashion sense that provided her with an ill fit in her schools, especially the private school from which she transferred where the girls favored "preppy" apparel in contrast to the dog collars, thick-soled "moon boots," red and black Goth-influenced clothing adorned with faux fur features, and other attire that she eventually assumed. Chloe's mental makeup separated her from the norm in school and among most of the teens in her town, whose female cohort she described as only interested in clothes and boys. Simultaneously, it affirmed her status and membership in the minor yet significant cultural stream of the anime through which she found growth and acceptance possible.

4.2. Conflicts over computer time

Because computer-based anime production and consumption became such an obsession for Chloe, access to the computer became a point of contention between her and her parents, causing a disruption in the social updraft provided by the anime world. Chloe was not engaged purely in an anti-authority struggle. Rather, her obsessive need to immerse herself in anime created tensions with those around her who expected more corporal human interaction. Chloe's mother used the word "clash" to describe what happened when Chloe was not allowed free time on the computer, a conflict that became a major topic in her therapy sessions. From Chloe's perspective the issue of computer access was a no-win situation. Despite her mother's admonitions about online safety, she felt that she knew and could trust the people with whom she collaborated and communicated online. Chloe believed that her mother "never really could understand what it's like for [her] to have online friends." She felt that her mother had no concept of what she was actually doing online, even though her mother spent as much time online as Chloe, albeit in other sorts of activities and communities that her mother considered to be safer and more appropriate.

In these disputes with her mother, Chloe viewed herself as the expert when it came to the Internet. Her mother in contrast believed that Chloe was far too trusting in the representations of people with whom she interacted, a problem that was realized at one point when an online male contact created a disturbance by trying to visit Chloe during school. She also worried that the

⁶ "Manga" references both singular and plural usage.

⁷ After one year, like many with Asperger's syndrome, she was academically dismissed from college because her obsessions with her personal and communal art, which commanded greater loyalty and thus time and attention than did her studies, overpowered her responsibilities to her assigned coursework.




 <p>NAME: _____</p> <p>AGE: 15</p> <p>STORY: GUNDAM WING FANCHACTER</p> <p>CHARACTER INFO: QUIET AND SWEET; THE GIRL-FRIEND OF QUATRE WINNER, AND ALSO HIS DISTANT COUSIN, AS WELL AS THE DISTANT COUSIN OF _____ - HENCE THE LAST NAME. SHE WAS SUPPOSED TO BE THE LAST REMAINING LINK BETWEEN THE WINNERS AND THE _____, AND YES, THAT'S INCEST BETWEEN HER AND _____. SHE WAS A GUNDAM PILOT WHO PILOTED THE SPHINX.</p>	 <p>NAME: _____</p> <p>AGE: 15</p> <p>STORY: GUNDAM S ORIGINAL CHARACTER</p> <p>CHARACTER INFO: STILL QUIET AND SWEET, BUT WITH DIFFERENT CHARACTERS INVOLVED. _____ TOOK THE PLACE OF _____; _____, THE CHARACTER ROLES REMAINED THE SAME, WITH _____ BEING HER COUSIN AND BOYFRIEND, ETC. ETC. AGAIN, A GUNDAM PILOT WHO PILOTED THE SPHINX, FIGHTING THE BLACK DAWN.</p>	 <p>NAME: _____</p> <p>AGE: 18</p> <p>STORY: S S ORIGINAL CHARACTER</p> <p>CHARACTER INFO: AHA, HERE'S THE MAIN BREAK. _____ BECOMES MUCH MORE LIKE ME. STILL KIND OF QUIET, BUT MUCH MORE OUT-GOING; _____ REMAINS HER BOYFRIEND, BUT THEY ARE NO LONGER RELATED IN ANY WAY. NO MORE INCEST. :O NOTHING TO DO WITH GUNDAMS WHATSOEVER, TOO! _____ IS NOW A WARRIOR OF THE PHOENIX, AND CAN USE MAGIC TO A SMALL DEGREE AS PART OF HER POWERS AS A SCAR. _____ HAS THE POWER OF NIGHT; NIGHT IS HER SPECIFIC ELEMENT. SHE WOULD BE CLASSIFIED AS A BARD. ALSO NOTE THE DRASTIC CHANGE IN BOTH AGE AND OUTFIT... THIS IS THE CURRENT _____</p>
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Fig. 1. Moon_A Timeline.

people with whom Chloe was connecting online were as emotionally fragile as her daughter, but with fewer intellectual assets and potentially less stable family backgrounds to support them. Both were, in a sense, right: Chloe's acceptance in and trust of the other participants in the online world did involve risks that on occasion produced a precarious balance between the medium's social affordances and potential predacious possibilities that present themselves in any social situation. The decelerated maturity that followed from her Asperger's traits led her parents to remain concerned about what her father termed her "child's naïveté" in using the web, yet both parents were able to extend their trust enough to accept and encourage her online friendships and her evolving sexuality, if tentatively and with a watchful eye.

As these conflicts illustrate, Chloe's engagement with the online anime community provided her with developmental affordances amidst tensions over the degree of her participation at the expense of materially personal social relationships. These parental concerns produced continual conflict in the home that resulted in frequent vocal outbursts and routine violent actions against the walls, door frames, fixtures, and other components of her physical environment. Amidst this strife Chloe used the online anime world and its tools and signs as mediational means that helped her to channel her growing sexual awareness and her proclivity toward working on narrow interests in miniscule detail. Anime thus provided a social updraft — considered positive to her, and only grudgingly so by her parents — that helped give her a sense of inclusion and provided a means through which she could explore, represent, and reflect on her emerging identity in the company of online friends who supported and appreciated her artistic ability and her orientation to the world. Her online community supported this trajectory, which took her in different directions from those available to most of her peers and different from any yet undertaken in her immediate and extended families.



Fig. 2. Axxxx_Phoenix Rising.

4.3. *The representation of self in text*

Chloe met her best friend Casey through a teenager she got to know during the first of her two hospitalizations for mental health crises. She and Casey engaged in role playing, collecting, and drawing fan fiction of Akira and Hikaru with friends. In the process of these activities, they were transferring from material to virtual what they could not express within the bounds of materially proximal social and cultural norms. Anime, particularly the *yaoi* genre, provided her with the resources to respond to the problematic situations in which she found herself. The fights between Chloe and her parents that ensued over computer use were often explosive because her parents were coming between her and the main mediational means she had for expressing self and the primary community through which that expression was validated. Chloe was attracted to the possibilities for interaction that anime offered and the related trajectory that it provided for her life, and these engagements differed significantly from those she encountered at home and in school.

Chloe used an Internet site specializing in anime and fantasy art to create galleries of her art, which others could view, comment on, and purchase. In her role as Moon, Chloe started posting her work on her personalized page at age 16. One such piece (see Fig. 3) was an assignment for an art class at the public high school she attended for eleventh and twelfth grades, in which she was asked to illustrate her concept of war and conflict. She explained that this black and white digital drawing was meaningful to her because it demonstrated people's reaction to what she labeled as her Asperger's characteristics. She described it as a "very personal piece for me." For an assignment on war and conflict, she said, "I chose to illustrate the battle I hold with myself. I have what's called Asperger's Syndrome. ... One thing we have is the inability to judge body language and personal space."

Chloe's recognition that she did not fit into the norm among her family and friends was inscribed in this text. She explained the drawing as a perspective representation of how others reacted to her tendency to be "clingy" and "suffocating" and how she could not understand many facial expressions such as those of the people in the left eye. Comments from online viewers of this picture ranged from laudations about her candid discussion of Asperger's to grateful fellow Asperger's cases who felt the drawing encapsulated their own experiences.

Through drawing, Chloe was finding a social life and updraft that did not necessarily fit the norms and expectations for a teenager of her socio-economic background. Her father's ideas for her social life before she began identifying as a lesbian included successful homecomings and proms, but for Chloe these events were too often emotionally stressful. Her "boyfriend" Jason would often go as a companion with her to these events, but she stated repeatedly that he was "only a friend." Instead she admitted to being "in love" with her best friend Casey, whose heterosexual orientation left those feelings unrequited. Chloe's gravitation toward same-sex relationships was available for exploration and representation through the fantasy life anime allowed, enabling her to envision and enact a possible world beyond the role expected of young Southern U.S. women from professional families.



Fig. 3. War and conflict.

Exploration of her sexuality connected her with the global cultural stream of *yaoi*, which helped her understand her own conception of herself as bisexual, and eventually lesbian.

Chloe used *yaoi* to draw herself into her characters, and the anime community as the social group through which she and her work found acceptance. Through the various improvisations that Chloe and her best friend Casey performed using their alter egos, Moon and Rain, they authored online and material selves. Chloe's artwork reached people around the world including, but not limited to, those *otaku* who influenced the form and meaning of her work. *Moon_A Timeline* (see Fig. 1) was compiled when Chloe was 18 and, following a graduation requiring an extra semester of high school, getting ready to go away to art school. The development of her character as depicted in these images benefitted from feedback from online and in-person friends, as did the quality of the art itself as determined by online cognoscenti and aficionados. Additionally, the stories of the characters changed dramatically as Chloe herself felt more empowered as a person and artist in the positive social updraft provided by the online anime culture.

According to Chloe, she crafted the head shot on the left when she was first learning to draw. She pointed out that the pose was copied from another anime character, and she made fun of herself for relying on imitation as a novice. Vygotsky (1987) in contrast views insightful imitation as central to initiating growth through "the active imitation of a model through play" (p. 345), a possibility that could account for Chloe's imitation of extant characters so as to learn conventions in the process of playing with boundaries. The second followed about two years after the first, and the third, whose quality she dismissed and calls a "concept sketch," was drawn closer to the time she compiled the timeline. She created the timeline, she said, "to show how much she [the character] has changed."

As Chloe grew as an artist, her skills became more precise. She learned through mimicking and copying, both of which are encouraged in the anime culture, using instructional drawing books and various online resources for models and understanding of process. Her subsequent, more personally expressive productions in turn contributed to the genre within which she worked. She also became involved in online exchanges in which drawings served as the medium for as gifts, as trades, and as sales. This development into a producer in anime's commercial dimension illustrates the manner in which the updraft of her anime involvement gave her a forward-looking disposition that, in her suicidal teen years, had otherwise not been available to her.

Chloe produced 4 versions of Moon drawn as gifts, trades, and commissions. In each version Moon had a distinct style. Chloe's own rendition of her character changed as she shared her vision of Moon with others. In the first image in "Moon_A Timeline," she used over 20 color shades, the mouth was miniscule, and she did not attempt to draw a full figure. The second image used ample shading as well; however, the piece was more complex. She did draw a full figure and included her *chibi*, a miniature version of a character who expressed particular emotions — in this case, joy. In the third rendition Chloe drew Moon with hyper-feminine anime features: wide eyes, doll-like lips, school-girl clothes, large breasts, and powerful but slender arms and legs. She also drew her in an outfit similar to what Chloe wore herself during this time in her life.

The storyline, too, moved from more derivative to more original text. In the early version Chloe used intertextual references to the *Gundam Wing* manga, which she read when she first immersed herself in the anime world. The Moon character's original last name (which has been changed for confidentiality purposes) alluded to the bond to a character in *Gundam Wing*, a name she ultimately discarded and rejected as immature for an artist of her growing stature among her peers. Moon served as the link between two Gundam families, explaining the reference to incestuous relationships. The final panel represents "the main break." In this rendition of Moon, Chloe incorporated both her vision of self and of her fictional creations.

"Axxxx_Phoenix Rising" (see Fig. 2) is an ink sketch of the main character in Chloe's collaborative online manga. Although she regarded this drawing as "nothing special," the character became the subject of at least 11 renditions posted online by Chloe, her friends, and commissioned artists. In each drawing, the phoenix has hyper-feminine features, large wings that are often rainbow colored, and a peacock-like tail. In another one of Chloe's drawings of this character, she explained that she was "the phoenix goddess who was murdered eighteen years ago." The seven slashes that it took to kill her were each the birthplace of the seven warriors whose battle would be chronicled in her online manga.

The phoenix itself is an archetypal character in anime. Osamu Tezuka, the creator of *Astro Boy* and the pioneer of the characteristic anime “puppy dog eyes,” created an anime series just before he died in 1989 entitled *Phoenix 2772*. The phoenix, known in Japan as *Hi no Tori*, is a symbol of immortality and rebirth. As drawn both by Tezuka and Chloe, the phoenix has peacock-like colorful tail feathers, although Chloe chose to draw her character with human features rather than as the actual bird. The phoenix also shows up in *Pokémon* (Ho-Oh and Moltres), *YuGiOh*, and *Fushigi Yugi*, all of which Chloe had read. The character's name is a reference to Chaldean mythology as the god of darkness and death. The intertextuality embodied in this drawing and its evolving character parallels Moon_A Timeline: As Axxxx was reborn, fought to survive, and gave birth to strong warriors, so too did Chloe, suggesting the ways in which her immersion in anime provided her with conventions and a broad conception of sexuality through which to depict and reflect on her emerging sense of self through the tools and signs available in and rewarded by the anime culture.

Both the latter Moon and Axxxx are representative of Chloe's use of anime to enact her narrative of self within the positive social updraft provided by the international online anime community and its affordances. Chloe struggled to connect with those who were not as engrossed in anime as she was. Even among other *otaku*, Chloe had a difficult time establishing relationships, characteristic of those diagnosed with Asperger's; such conflicts took place both online and with her corporeal friends, whom she often repelled through the demands she made on them to meet her emotional needs. Additionally, Chloe felt disconnected from the daily setting of her high schools and at odds with her parents and brother.

The process of creating imaged and written narratives, as documented in “Moon_A Timeline” and “Axxxx_Phoenix Rising,” moved Chloe into an updraft in which she could enact her constructed self. This process was not an individual venture. Feedback and resistance from those who were and those who were not part of her trajectory shaped the path on which she traveled. Yet Chloe's use of the cultural tools available to her through her participation in the anime community provided the agency necessary to resist and accept others' expectations, definitions, and social futures for her, and a cultural stream more attuned to her neurotypical makeup and sexual orientation.

5. Discussion

Because the development of a concept of self is interactional, the access to a variety of mediational means is instrumental in considering agency. Wertsch and Rupert (1993) assert that “human action is fundamentally shaped and constrained by the mediational means it employs. ... the creation of new ideas and practices occurs through operating on existing mediational means” (p. 230). Chloe's transformation and creativity were available through the mediational means she employed within the social updraft provided by the online anime culture. Her case encourages attention to the tools she used in her construction of self as psychically extranormative and as sexually oriented in ways historically reviled in the regions of the U.S. in which she grew up. *Dojinshi* and *yaoi* provided cultural channels in which she could be subversive and live a double life without mainstream social control. These spaces were necessary for Chloe on her path to self-construction and social status.

Chloe authored self within a particular historical, economic, social, and cultural milieu. Her parents' level of affluence and upper-middle-class orientation provided her with access to the digital mediational tools she used in her composition of self, and further supplied Chloe and her brother with media that increased their literacy. When her parents saw that Chloe was interested in anime, they provided her with the manga, the Japanese videos, and the artistic equipment she needed to participate, even as these provisions ultimately produced conflict over their degree of usage. Chloe had the support and acceptance she needed to begin constructing an acceptable narrative of self, albeit a level of support limited by conditions and concerns. Once connected with others who shared her interests and valued her contributions, Chloe found ways to flourish within the contours of the anime culture and its participants.

Through the ongoing multimodal composition of her life, Chloe manifested coherence in her art work, her online collaborations, her sexuality, and her mental health. Her imagination and creativity aided her as she designed spaces for herself online and with a group of like-minded peers. She also had access to mental health care in therapeutic and medicinal forms, and her parents provided additional costly interventions that assisted her in navigating a pathway toward independent living and stable employment, end states that many who share her mental health profile never reach. We thus do not romanticize her case, which illustrates one pathway that favorable circumstances enabled. Our involvement with other families that include extranormal children suggests that even the most dedicated parenting cannot guarantee a happy outcome, and our account of Chloe is offered in sympathy for those families in which even a positive social updraft is not enough to prevent difficult and tragic consequences (Smagorinsky, 2011).

We nonetheless see potential for Vygotsky's (1993) work in defectology to have salience for the mental health field, providing as it does a forward-looking approach that emphasizes the need to consider extranormativity to be a social problem, rather than one to be corrected primarily in individuals of difference. Even as we recognize the problem as social, we would be remiss in dismissing the role of drug therapy in assisting many current people's efforts to cope with neuroatypicality, including those we — this study's coauthors — have experienced ourselves.

Vygotsky's (1993) view of providing alternative means of mediation such that people may become socialized toward levels of acceptance and status has implications for considering how to accommodate neurotypicals. For Chloe, the anime world allowed her to become accepted at least in part *because of her obsessions*, which granted her status as an *otaku*, rather than having this disposition be considered a *disorder*, as is built into the Obsessive–Compulsive Disorder diagnosis. The positive social updraft that the online anime culture provided for her enabled her to find a virtual community in a town where material involvement was limited to weekly *Pokémon* gaming, often with people of more casual interests than hers, and to a handful of friends who liked to share their art. By engaging with a validating community of practice through which she could use art and narrative to represent

her emerging identity, she managed a very challenging time of life, one in which she and others like her are vulnerable in many ways, and provided a platform from which she could launch her growth into adulthood.

Although the provision of positive social updrafts is not a panacea, we see potential for an approach based on attending to the context of development, the allowance of appropriate mediational tools, the cultivation of social channels for satisfying and rewarding cultural labor, and greater appreciation of difference as less disordered and more in need of unconventional means of mediation for fostering a climate conducive to expanding and increasing the opportunities for happy lives for a wider range of people. We do not expect all people to have the same levels of support as Chloe's family provided, and a tragic consequence of a competitive society is that those who start out with the fewest resources face the greatest obstacles in finding ways to make contributions that enrich their own lives and those of others. When financial impediments are complicated by mental health differences that go unattended and when punitive responses follow from what others construct as asocial or antisocial behavior, one's prospects for happiness diminish. Further, when psychosis is extreme, even highly supportive and well-resourced families can feel helpless in finding ways to provide a place in the world for their loved ones. We hope, however, that our contribution of Chloe's case helps others think of ways to expand life's possibilities for the greatest range of society's members by shifting attention to the contexts of human development and considering more humane attitudes and more expansive thinking about how to provide others with opportunities and updrafts for living enriching lives.

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